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New R&D agreement promotes technology transfer

by Juventino Garcia, Directed Energy Directorate

KIRTLAND AIR FORCE BASE, N.M. — Creating new opportunities for technology transfer is the primary purpose of a cooperative research and development agreement signed last month between the Air Force and the New Mexico Institute of Mining and Technology in Socorro, N.M.

The Institute's agreement with the Air Force Research Laboratory's Directed Energy Directorate builds upon an educational partnership agreement signed by the two organizations last year. While that initial agreement stressed classroom education in optics, the new agreement expands the capabilities of existing optical laboratories. People from both organizations can use these laboratories to transfer optics research and development skills and knowledge to graduate and undergraduate students enrolled in such related degree programs as engineering and science.

Both organizations are expected to benefit from the agreement. Air Force researchers believe it will improve their ability to provide innovative technologies that can aid the warfighter with critical strategic and tactical defenses. The relationship will also encourage students to consider future employment with the Air Force.

The Institute, also known as New Mexico Tech, anticipates the agreement will attract graduate and undergraduate science, engineering and technology students to the field of optics. Student internships are also expected, which will provide opportunities for research under the guidance of experienced optical engineers, physicists and other experts.

By combining expertise from both organizations, officials believe the results will be world-class capabilities in fabrication, coatings, metrology for meter-class and larger optics, and optical coating technologies for temperature-sensitive lightweight optical components.

New Mexico Tech also has expertise in laser weapons development and testing within its Energetic Materials Research and Testing Center. The Directed Energy Directorate maintains experts in large-aperture telescopes and other optics-based intelligence systems within its Optical Components Engineering Laboratory.

This expertise, combined with joint capabilities, can be applied to a wide range of potential applications for ground, air and space-based systems being worked by Department of Defense organizations, the Department of Energy, the National Aeronautics and Space Administration and other government agencies. @